

AMENDMENT NO. _____ Calendar No. _____

Purpose: To require an assessment of carbon sequestration and methane and nitrous oxide emissions from terrestrial ecosystems.

IN THE SENATE OF THE UNITED STATES—110th Cong., 1st Sess.

S. 2191

To direct the Administrator of the Environmental Protection Agency to establish a program to decrease emissions of greenhouse gases, and for other purposes.

Referred to the Committee on _____ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. CRAIG

Viz:

1 At the end of subtitle G of title III, add the following:

2 **SEC. 370 . ASSESSMENT OF CARBON SEQUESTRATION AND**

3 **METHANE AND NITROUS OXIDE EMISSIONS**

4 **FROM TERRESTRIAL ECOSYSTEMS.**

5 (a) DEFINITIONS.—In this section:

6 (1) ADAPTATION STRATEGY.—The term “adap-
7 tation strategy” means a land use and management
8 strategy that can be used to increase the sequestra-
9 tion capabilities of any terrestrial ecosystem.

1 (2) ASSESSMENT.—The term “assessment”
2 means the national assessment authorized under
3 subsection (b).

4 (3) COVERED GREENHOUSE GAS.—The term
5 “covered greenhouse gas” means carbon dioxide, ni-
6 trous oxide, and methane gas.

7 (4) FEDERAL LAND.—The term “Federal land”
8 means—

9 (A) National Forest System land; and

10 (B) public lands (as defined in section 103
11 of the Federal Land Policy and Management
12 Act of 1976 (43 U.S.C. 1702)).

13 (5) NATIVE PLANT SPECIES.—The term “native
14 plant species” means any noninvasive, naturally oc-
15 ccurring plant species within a terrestrial ecosystem.

16 (6) SECRETARY.—The term “Secretary” means
17 the Secretary of Agriculture.

18 (7) TERRESTRIAL ECOSYSTEM.—

19 (A) IN GENERAL.—The term “terrestrial
20 ecosystem” means any ecological and surficial
21 geological system on Federal land.

22 (B) INCLUSIONS.—The term “terrestrial
23 ecosystem” includes—

24 (i) forest land;

25 (ii) grassland; and

1 (iii) freshwater aquatic ecosystems.

2 (b) AUTHORIZATION OF ASSESSMENT.—Not later
3 than 2 years after the date on which the final methodology
4 is published under subsection (f)(3)(D), the Secretary
5 shall complete a national assessment of—

6 (1) the quantity of carbon stored in and re-
7 leased from terrestrial ecosystems, including from
8 man-caused and natural fires; and

9 (2) the annual flux of covered greenhouse gases
10 in and out of terrestrial ecosystems.

11 (c) COMPONENTS.—In conducting the assessment,
12 the Secretary shall—

13 (1) determine the processes that control the
14 flux of covered greenhouse gases into and out of
15 each terrestrial ecosystem;

16 (2) estimate the technical and economic poten-
17 tial for increasing carbon sequestration in natural
18 and managed terrestrial ecosystems through man-
19 agement activities or restoration activities in each
20 terrestrial ecosystem;

21 (3) develop near-term and long-term adaptation
22 strategies or mitigation strategies that can be em-
23 ployed—

24 (A) to enhance the sequestration of carbon
25 in each terrestrial ecosystem;

1 (B) to reduce emissions of covered green-
2 house gases, including emissions from
3 uncharacteristically severe wildfires; and

4 (C) to adapt to climate change; and

5 (4) estimate annual carbon sequestration capac-
6 ity of terrestrial ecosystems—

7 (A) if no management activities or restora-
8 tion activities to benefit sequestration were con-
9 ducted; and

10 (B) under a range of policies in support of
11 management activities to benefit sequestration.

12 (d) USE OF NATIVE PLANT SPECIES.—In developing
13 restoration activities under subsection (c)(2) and manage-
14 ment strategies and adaptation strategies under sub-
15 section (c)(3), the Secretary shall emphasize the use of
16 native plant species (including mixtures of many native
17 plant species) for sequestering covered greenhouse gas in
18 each terrestrial ecosystem.

19 (e) CONSULTATION.—In conducting the assessment
20 and developing the methodology under subsection (f), the
21 Secretary shall consult with—

22 (1) the Secretary of Energy;

23 (2) the Secretary of the Interior;

24 (3) the Administrator;

25 (4) the heads of other relevant agencies;

1 (5) consortia based at institutions of higher
2 education and with research corporations; and

3 (6) Federal forest and grassland managers.

4 (f) METHODOLOGY.—

5 (1) IN GENERAL.—Not later than 1 year after
6 the date of enactment of this Act, the Secretary
7 shall develop a methodology for conducting the as-
8 sessment.

9 (2) REQUIREMENTS.—The methodology devel-
10 oped under paragraph (1)—

11 (A) shall—

12 (i) determine the method for meas-
13 uring, monitoring, quantifying, and mone-
14 tizing covered greenhouse gas emissions
15 and reductions, including methods for allo-
16 cating and managing offsets or credits;
17 and

18 (ii) estimate the total capacity of each
19 terrestrial ecosystem to—

20 (I) sequester carbon; and

21 (II) reduce emissions of covered
22 greenhouse gases; and

23 (B) may employ economic and other sys-
24 tems models, analyses, and estimations, to be

1 developed in consultation with each of the indi-
2 viduals described in subsection (e).

3 (3) EXTERNAL REVIEW AND PUBLICATION.—

4 On completion of a proposed methodology, the Sec-
5 retary shall—

6 (A) publish the proposed methodology;

7 (B) not later than 60 days before the date
8 on which the final methodology is published, so-
9 licit comments from—

10 (i) the public; and

11 (ii) heads of affected Federal and
12 State agencies;

13 (C) establish a panel to review the pro-
14 posed methodology published under subpara-
15 graph (A) and any comments received under
16 subparagraph (B), to be composed of mem-
17 bers—

18 (i) with expertise in the matters de-
19 scribed in subsections (c) and (d); and

20 (ii) that are, as appropriate, rep-
21 resentatives of Federal agencies, institu-
22 tions of higher education, nongovernmental
23 organizations, State organizations, indus-
24 try, and international organizations; and

1 (D) on completion of the review under sub-
2 paragraph (C), publish in the Federal register
3 the revised final methodology.

4 (g) ESTIMATE; REVIEW.—The Secretary shall—

5 (1) based on the assessment, prescribe the data
6 and analyses needed to establish a scientifically
7 sound estimate of—

8 (A) the carbon sequestration capacity of
9 relevant terrestrial ecosystems;

10 (B) a national inventory of covered green-
11 house gas sources that is consistent with the in-
12 ventory prepared by the Environmental Protec-
13 tion Agency entitled the “Inventory of U.S.
14 Greenhouse Gas Emissions and Sinks: 1990-
15 2005”; and

16 (C) the willingness of covered greenhouse
17 gas emitters to pay to sequester the covered
18 greenhouse gases emitted by the applicable
19 emitters in designated terrestrial ecosystems;
20 and

21 (2) not later than 180 days after the date on
22 which the assessment is completed, submit to the
23 heads of applicable Federal agencies and the appro-
24 priate committees of Congress a report that de-
25 scribes the results of the assessment.

1 (h) DATA REPORT AND AVAILABILITY.—On comple-
2 tion of the assessment, the Secretary shall incorporate the
3 results of the assessment into a web-accessible database
4 for public use.